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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,507	07/06/2001	Gary J. Oleynick	003A.0005.U1(US)	4180

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EXAMINER

LEON, EDWIN A

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 05/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/900,507

Applicant(s)

OLEYNICK ET AL.

Examiner

Edwin A. León

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 34 is rejected under 35 U.S.C. 102(b) as being anticipated by Wu (U.S. Patent No. 6,027,375). Wu discloses a universal serial bus (USB) electrical connector plug (9) comprising: a signal contact supporting deck (93,98); electrical signal conductors (97) directly stationarily attached to a first side (98) of the supporting deck (93,98); and electrical power conductors (95) directly stationarily attached to an opposite second side (93) of the supporting deck (93,98), wherein the supporting deck (93,98) is sized and shaped to be inserted into a supporting deck receiving aperture (21,22) of a USB electrical connector receptacle (1), and wherein the electrical signal conductors (97) are aligned in a USB contact array. See Fig. 5.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (U.S. Patent No. 6,027,375) in view of Chang et al. (U.S. Patent No. 6,296,521). With regard to Claims 1, 6, 11-12, 14, 18, 20, 26-27, and 29-31, Wu discloses an electrical connector comprising: electrical contacts (5,6) comprising signal contacts (6) and power contacts (5); and a housing (2) having the electrical contacts (5,6) connected thereto, the housing (2) comprising at least two vertically offset electrical plug receiving areas (21,22), wherein the signal contacts (6) extend into one of the receiving areas (21,22) in a universal serial bus (USB) location configuration, and wherein the power contacts (5) extend into the other of the receiving areas (21,22). See Figs. 1-5.

Wu doesn't show the signal contacts extending into the receiving areas and the power contacts extending into the receiving areas.

Chang et al. discloses an electrical connector (10) having signal contacts (24) extending into a receiving area (below 18) in a universal serial bus (USB) location configuration, and power contacts (26) extending into the same receiving area (below 18). See Figs. 1-5.

Thus, it would have been obvious with ordinary skill in the art to modify the electrical connector of Wu by including the signal contacts and the power contacts extending into the same receiving area as taught in Chang et al. to add the transmission or signal functions in to the connector's areas without increasing its size.

With regard to Claim 2, Wu discloses the signal contacts (6) comprising spring contact sections (51,61) extending into the plug receiving areas (21,22), tails (53,63) extending from a bottom side of the housing (2), and bent sections therebetween. See Figs. 1-5.

With regard to Claim 3, Wu discloses the spring contact sections (61) of the signal contacts (6) extend into two of the plug receiving areas (21,22) in opposite directions. See Figs. 1-5.

With regard to Claim 4, Wu discloses the power contacts (5) comprising spring contact sections (51) extending into the plug receiving areas (21,22), tails (53) extending from a bottom side of the housing (2), and bent sections therebetween. See Figs. 1-5.

With regard to Claim 5, Wu discloses the spring contact sections (51) of the power contacts (5) extending into two of directions. See Figs. 1-5.

With regard to Claim 7, Wu discloses the electrical contacts (5,6) extending into a first one of the plug receiving areas (21,22) are arranged as a substantially mirror image to the electrical contacts (5,6) extending into a plug receiving area (21,22) comprises four of the signal contacts (6) extending there into and two of the power contacts (5) extending there into opposite the four signal contacts (6). See Figs. 1-5.

With regard to Claim 9, Chang et al. discloses an electrically conductive shell (4) connected to the housing (16), the shell (14) comprising contacts (in 14 sides) extending into the plug receiving area (below 18). See Figs. 1-5.

With regard to Claim 10, Wu discloses the housing (2) comprising projections (3,4) extending into the receiving areas (21,22) in a forward direction, portions of the signal contacts (6) extending through cavities along the projections (3,4), and ends of the signal contacts (6) being preloaded against sections of the projections (3,4). See Figs. 1-5.

With regard to Claim 13, Wu discloses the electrical signal contacts (6) extending into the receiving areas (21,22) opposite the electrical power contacts (5). See Figs. 1-5.

With regard to Claim 15-16, Wu discloses the receiving areas (21,22) extending into a front side of the housing (2), and wherein ends of the contacts (5,6) extend from a bottom side of the housing (2). See Figs. 1-5.

With regard to Claim 17, Chang et al. discloses an electrically conductive shell (4) connected to the housing (16), the shell (14) comprising contact arms (in the sides of 14), which extend into the receiving area (below 18) in opposite directions. See Figs. 1-5.

With regard to Claim 19, Wu discloses the housing (2) comprising a section (between 21 and 22) located between and separating the two plug receiving areas (21,22) from each other. See Figs. 1-5.

With regard to Claim 21, Wu discloses the power contacts (5) extending from the section (between 21 and 22) in opposite directions into the two receiving areas (21,22). See Figs. 1-5.

With regard to Claim 22, Wu discloses the signal contacts (6) extending into the first and second receiving areas (21,22) in respective opposite inward directions. See Figs. 1-5.

With regard to Claim 23, Chang et al. discloses an electrically conductive shell (14) connected to the housing (16), the shell (14) comprising contact arms (in the sides of 14) extending into the receiving area (below 18) from four sides of the connector (10). See Figs. 1-5.

With regard to Claim 24, Wu discloses the housing (2) comprising two projections (3,4) extending towards a front end of the housing (2) above and below a center projection (225) of the housing (2), and wherein the signal contacts (6) extend through the two projections (3,4) and project out of the two projections (3,4) and project out of the two projections (3,4) in opposite directions towards the center projection (225). See Figs. 1-5.

With regard to Claim 25, Wu discloses the power contacts (5) extending through and out of the center projection (225) in opposite directions into the two plug receiving areas (21,22). See Figs. 1-5.

With regard to Claim 28, Wu discloses the signal contacts (6) extend into the receiving areas (21,22) in a same direction. See Figs. 1-5.

With regard to Claim 32, Wu discloses the signal contacts (6) and the power contacts (5) extending into the first receiving area section in opposite directions. See Figs. 1-5.

With regard to Claim 33, Wu discloses the first and second receiving area sections (21,22) each comprising a deck receiving area, and a common power contact section receiving area is located between the deck receiving areas (21,22). See Figs. 1-5.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chen et al. (U.S. Patent No. 6,183,292), Costello et al. (U.S. Patent No. 6,162,089), Lin (U.S. Patent No. 6,346,009), Kao et al. (U.S. Patent No. 6,165,014), Zhu et al. (U.S. Patent No. 6,168,468), Wu (U.S. Patent No. 6,155,872), Nishio et al. (U.S. Patent No. 5,938,473), Michaelis et al. (U.S. Patent No. 6,007,379), Wu (U.S. Patent No. 6,053,773), Tan et al. (U.S. Patent No. 5,637,015), Belopolsky et al. (U.S. Patent No. 6,183,300) Wu (U.S. Patent No. 6,217,378), David et al. (U.S. Patent No. 6,273,757), and Wu (U.S. Patent No. 6,159,039) disclose electrical connectors having signal and power contacts in receiving areas.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (703) 308-6253. The examiner can normally be reached on Monday - Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703)


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308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Edwin A. Leon
AU 2833

EAL
May 5, 2002


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